

05-90
10/11

OIRE

CRF Errors Corrected by the STIC Systems Branch

CRF Processing Date:
Edited by:

11/1/2001

Entered by:

(STIC stat)

Serial Number: 09/757,049A

Changed a file from non-ASCII to ASCII

ENTERED

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically:

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was the prior application data; or other _____

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included: ..

Deleted extra, invalid, headings used by an applicant, specifically:

Deleted: non-ASCII "garbage" at the beginning/end of files; secretary initials/filename at end of file;
 page numbers throughout text; other invalid text, such as _____

Inserted mandatory headings, specifically:

Corrected an obvious error in the response, specifically:

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically:

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

Other:

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1995

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/757,049A

DATE: 11/01/2001

TIME: 19:01:45

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\11012001\I757049A.raw

2 <110> APPLICANT: BERNSTEIN, Harold S.
 3 COUGHLIN, Shaun R.
 5 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR REGULATING CELL CYCLE
 6 PROGRESSION
 8 <130> FILE REFERENCE: UCSF-020/02US
C--> 10 <140> CURRENT APPLICATION NUMBER: US/09/757,049A *PS*
 11 <141> CURRENT FILING DATE: 2001-01-08
 13 <150> PRIOR APPLICATION NUMBER: US 09/156,316
 14 <151> PRIOR FILING DATE: 1998-09-18
 16 <150> PRIOR APPLICATION NUMBER: US 60/060,688
 17 <151> PRIOR FILING DATE: 1997-09-22
 19 <160> NUMBER OF SEQ ID NOS: 50
 21 <170> SOFTWARE: PatentIn Ver. 2.1
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 802
 25 <212> TYPE: PRT
 26 <213> ORGANISM: Homo sapiens
 28 <400> SEQUENCE: 1
 29 Met Pro Arg Ile Met Ile Lys Gly Gly Val Trp Arg Asn Thr Glu Asp
 30 1 5 10 15
 32 Glu Ile Leu Lys Ala Ala Val Met Lys Tyr Gly Lys Asn Gln Trp Ser
 33 20 25 30
 35 Arg Ile Ala Ser Leu Leu His Arg Lys Ser Ala Lys Gln Cys Lys Ala
 36 35 40 45
 38 Arg Trp Tyr Glu Trp Leu Asp Pro Ser Ile Lys Lys Thr Glu Trp Ser
 39 50 55 60
 41 Arg Glu Glu Glu Glu Lys Leu Leu His Leu Ala Lys Leu Met Pro Thr
 42 65 70 75 80
 44 Gln Trp Arg Thr Ile Ala Pro Ile Ile Gly Arg Thr Ala Ala Gln Cys
 45 85 90 95
 47 Leu Glu His Tyr Glu Phe Leu Leu Asp Lys Ala Ala Gln Arg Asp Asn
 48 100 105 110
 50 Glu Glu Glu Thr Thr Asp Asp Pro Arg Lys Leu Lys Pro Gly Glu Ile
 51 115 120 125
 53 Asp Pro Asn Pro Glu Thr Lys Pro Ala Arg Pro Asp Pro Ile Asp Met
 54 130 135 140
 56 Asp Glu Asp Glu Leu Glu Met Leu Ser Glu Ala Arg Ala Arg Leu Ala
 57 145 150 155 160
 59 Asn Thr Gln Gly Lys Lys Ala Lys Arg Lys Ala Arg Glu Lys Gln Leu
 60 165 170 175
 62 Glu Glu Ala Arg Arg Leu Ala Ala Leu Gln Lys Arg Arg Glu Leu Arg
 63 180 185 190
 65 Ala Ala Gly Ile Glu Ile Gln Lys Lys Arg Lys Arg Lys Arg Gly Val
 66 195 200 205
 68 Asp Tyr Asn Ala Glu Ile Pro Phe Glu Lys Lys Pro Ala Leu Gly Phe
 69 210 215 220
 71 Tyr Asp Thr Ser Glu Glu Asn Tyr Gln Ala Leu Asp Ala Asp Phe Arg

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Input Set : A:\PTO.AMC.txt
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72	225	230	235	240
74	Lys Leu Arg Gln Gln Asp Leu Asp Gly Glu	Leu Arg Ser Glu Lys Glu		
75	245	250	255	
77	Gly Arg Asp Arg Lys Lys Asp Lys Gln His	Leu Lys Arg Lys Lys Glu		
78	260	265	270	
80	Ser Asp Leu Pro Ser Ala Ile Leu Gln Thr Ser	Gly Val Ser Glu Phe		
81	275	280	285	
83	Thr Lys Lys Arg Ser Lys Leu Val Leu Pro	Gln Ile Ser Asp		
84	290	295	300	
86	Ala Glu Leu Gln Glu Val Val Lys Val Gly	Gln Ala Ser Glu Ile Ala		
87	305	310	315	320
89	Arg Gln Thr Ala Glu Glu Ser Gly Ile Thr	Asn Ser Ala Ser Ser Thr		
90	325	330	335	
92	Leu Leu Ser Glu Tyr Asn Val Thr Asn Asn	Ser Val Ala Leu Arg Thr		
93	340	345	350	
95	Pro Arg Thr Pro Ala Ser Gln Asp Arg Ile	Leu Gln Glu Ala Gln Asn		
96	355	360	365	
98	Leu Met Ala Leu Thr Asn Val Asp Thr Pro	Leu Lys Gly Gly Leu Asn		
99	370	375	380	
101	Thr Pro Leu His Glu Ser Asp Phe Ser Gly	Val Thr Pro Gln Arg Gln		
102	385	390	395	400
104	Val Val Gln Thr Pro Asn Thr Val Leu Ser	Thr Pro Phe Arg Thr Pro		
105	405	410	415	
107	Ser Asn Gly Ala Glu Gly Leu Thr Pro Arg	Ser Gly Thr Thr Pro Lys		
108	420	425	430	
110	Pro Val Ile Asn Ser Thr Pro Gly Arg Thr	Pro Leu Arg Asp Lys Leu		
111	435	440	445	
113	Asn Ile Asn Pro Glu Asp Gly Met Ala Asp	Tyr Ser Asp Pro Ser Tyr		
114	450	455	460	
116	Val Lys Gln Met Glu Arg Glu Ser Arg Glu	His Leu Arg Leu Gly Leu		
117	465	470	475	480
119	Leu Gly Leu Pro Ala Pro Lys Asn Asp Phe	Glu Ile Val Leu Pro Glu		
120	485	490	495	
122	Asn Ala Glu Lys Glu Leu Glu Arg Glu Ile	Asp Asp Thr Tyr Ile		
123	500	505	510	
125	Glu Asp Ala Ala Asp Val Asp Ala Arg Lys	Gln Ala Ile Arg Asp Ala		
126	515	520	525	
128	Glu Arg Val Lys Glu Met Lys Arg Met His	Lys Ala Val Gln Lys Asp		
129	530	535	540	
131	Leu Pro Arg Pro Ser Glu Val Asn Thr Glu	Ile Leu Arg Pro Leu Asn		
132	545	550	555	560
134	Val Glu Pro Pro Leu Thr Asp Leu Gln Lys	Ser Glu Glu Leu Ile Lys		
135	565	570	575	
137	Lys Glu Met Ile Thr Met Leu His Tyr Asp	Leu Leu His His Pro Tyr		
138	580	585	590	
140	Glu Pro Ser Gly Asn Lys Lys Gly Lys Thr	Val Gly Phe Gly Thr Asn		
141	595	600	605	
143	Asn Ser Glu His Ile Thr Tyr Leu Glu His	Asn Pro Tyr Glu Lys Phe		
144	610	615	620	

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TIME: 19:01:45

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\11012001\I757049A.raw

```

146 Ser Lys Glu Glu Leu Lys Lys Ala Gln Asp Val Leu Val Gln Glu Met
147 625           630           635           640
149 Glu Val Val Lys Gln Gly Met Ser His Gly Glu Leu Ser Ser Glu Ala
150           645           650           655
152 Tyr Asn Gln Val Trp Glu Glu Cys Tyr Ser Gln Val Leu Tyr Leu Pro
153           660           665           670
155 Gly Gln Ser Arg Tyr Thr Arg Ala Asn Leu Ala Ser Lys Lys Asp Arg
156           675           680           685
158 Ile Glu Ser Leu Glu Lys Arg Leu Glu Ile Asn Arg Gly His Met Thr
159           690           695           700
161 Thr Glu Ala Lys Arg Ala Ala Lys Met Glu Lys Lys Met Lys Ile Leu
162 705           710           715           720
164 Leu Gly Gly Tyr Gln Ser Arg Ala Met Gly Leu Met Lys Gln Leu Asn
165           725           730           735
167 Asp Leu Trp Asp Gln Ile Glu Gln Ala His Leu Glu Leu Arg Thr Phe
168           740           745           750
170 Glu Glu Leu Lys Lys His Glu Asp Ser Ala Ile Pro Arg Arg Leu Glu
171           755           760           765
173 Cys Leu Lys Glu Asp Val Gln Arg Gln Gln Glu Arg Glu Lys Glu Leu
174           770           775           780
176 Gln His Arg Tyr Ala Asp Leu Leu Glu Lys Glu Thr Leu Lys Ser
177 785           790           795           800
179 Lys Phe
183 <210> SEQ ID NO: 2
184 <211> LENGTH: 51
185 <212> TYPE: PRT
186 <213> ORGANISM: Homo sapiens
188 <400> SEQUENCE: 2
189 Ile Lys Gly Gly Val Trp Arg Asn Thr Glu Asp Glu Ile Leu Lys Ala
190 1           5           10           15
192 Ala Val Met Lys Tyr Gly Lys Asn Gln Trp Ser Arg Ile Ala Ser Leu
193           20          25          30
195 Leu His Arg Lys Ser Ala Lys Gln Cys Lys Ala Arg Trp Tyr Glu Trp
196           35          40          45
198 Leu Asp Pro
199           50
202 <210> SEQ ID NO: 3
203 <211> LENGTH: 51
204 <212> TYPE: PRT
205 <213> ORGANISM: Schizosaccharomyces pombe
207 <400> SEQUENCE: 3
208 Leu Lys Gly Gly Ala Trp Lys Asn Thr Glu Asp Glu Ile Leu Lys Ala
209 1           5           10           15
211 Ala Val Ser Lys Tyr Gly Lys Asn Gln Trp Ala Arg Ile Ser Ser Leu
212           20          25          30
214 Leu Val Arg Lys Thr Pro Lys Gln Cys Lys Ala Arg Trp Tyr Glu Trp
215           35          40          45
217 Ile Asp Pro
218           50

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/757,049A

DATE: 11/01/2001

TIME: 19:01:45

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\11012001\I757049A.raw

221 <210> SEQ ID NO: 4
 222 <211> LENGTH: 50
 223 <212> TYPE: PRT
 224 <213> ORGANISM: Homo sapiens
 226 <400> SEQUENCE: 4
 227 Val Lys Gly Pro Trp Thr Lys Glu Glu Asp Gln Lys Val Ile Glu Leu
 228 1 5 10 15
 230 Val Lys Lys Tyr Gly Thr Lys Gln Trp Thr Leu Ile Ala Lys His Leu
 231 20 25 30
 233 Lys Gly Arg Leu Gly Lys Gln Cys Arg Glu Arg Trp His Asn His Leu
 234 35 40 45
 236 Asn Pro
 237 50
 240 <210> SEQ ID NO: 5
 241 <211> LENGTH: 50
 242 <212> TYPE: PRT
 243 <213> ORGANISM: Homo sapiens
 245 <400> SEQUENCE: 5
 246 Ile Lys Gly Pro Trp Thr Lys Glu Glu Asp Gln Lys Val Ile Glu Leu
 247 1 5 10 15
 249 Val Gln Lys Tyr Gly Pro Lys Arg Trp Ser Leu Ile Ala Lys His Leu
 250 20 25 30
 252 Lys Gly Arg Ile Gly Lys Gln Cys Arg Glu Arg Trp His Asn His Leu
 253 35 40 45
 255 Asn Pro
 256 50
 259 <210> SEQ ID NO: 6
 260 <211> LENGTH: 50
 261 <212> TYPE: PRT
 262 <213> ORGANISM: Homo sapiens
 264 <400> SEQUENCE: 6
 265 Ile Lys Gly Pro Trp Thr Lys Glu Glu Asp Gln Lys Val Ile Glu Leu
 266 1 5 10 15
 268 Val Gln Lys Tyr Gly Pro Lys Arg Trp Ser Val Ile Ala Lys His Leu
 269 20 25 30
 271 Lys Gly Arg Ile Gly Lys Gln Cys Arg Glu Arg Trp His Asn His Leu
 272 35 40 45
 274 Asn Pro
 275 50
 278 <210> SEQ ID NO: 7
 279 <211> LENGTH: 123
 280 <212> TYPE: PRT
 281 <213> ORGANISM: Homo sapiens
 283 <400> SEQUENCE: 7
 284 Pro Leu Lys Gly Gly Leu Asn Thr Pro Leu His Glu Ser Asp Phe Ser
 285 1 5 10 15
 287 Gly Val Thr Pro Gln Arg Gln Val Val Gln Thr Pro Asn Thr Val Leu
 288 20 25 30
 290 Ser Thr Pro Phe Arg Thr Pro Ser Asn Gly Ala Glu Gly Leu Thr Pro

RAW SEQUENCE LISTING DATE: 11/01/2001
 PATENT APPLICATION: US/09/757,049A TIME: 19:01:45

Input Set : A:\PTO.AMC.txt
 Output Set: N:\CRF3\11012001\I757049A.raw

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291      35          40          45
293 Arg Ser Gly Thr Thr Pro Lys Pro Val Ile Asn Ser Thr Pro Gly Arg
294      50          55          60
296 Thr Pro Leu Arg Asp Lys Leu Asn Ile Asn Pro Glu Asp Gly Met Ala
297      65          70          75          80
299 Asp Tyr Ser Asp Pro Ser Tyr Val Lys Gln Met Glu Arg Glu Ser Arg
300      85          90          95
302 Glu His Leu Arg Leu Gly Leu Leu Pro Ala Pro Lys Asn Asp
303      100         105         110
305 Phe Glu Ile Val Leu Pro Glu Asn Ala Glu Lys
306      115         120
309 <210> SEQ ID NO: 8
310 <211> LENGTH: 107
311 <212> TYPE: PRT
312 <213> ORGANISM: Schizosaccharomyces pombe
314 <400> SEQUENCE: 8
315 Ser Val Thr Ile Glu Val Arg Asn Gln Leu Met Asn Arg Glu Gln Ser
316      1           5           10          15
318 Ser Leu Leu Gly Gln Glu Ser Ile Pro Leu Gln Pro Gly Gly Thr Gly
319      20          25          30
321 Tyr Thr Gly Val Thr Pro Ser His Ala Ala Asn Gly Ser Ala Leu Ala
322      35          40          45
324 Ala Pro Gln Ala Thr Pro Phe Arg Thr Pro Arg Asp Thr Phe Ser Ile
325      50          55          60
327 Asn Ala Ala Ala Glu Arg Ala Gly Arg Leu Ala Ser Glu Arg Glu Asn
328      65          70          75          80
330 Lys Ile Arg Leu Lys Ala Leu Arg Glu Leu Leu Ala Lys Leu Pro Lys
331      85          90          95
333 Pro Lys Asn Asp Tyr Glu Leu Met Glu Pro Arg
334      100         105
337 <210> SEQ ID NO: 9
338 <211> LENGTH: 119
339 <212> TYPE: PRT
340 <213> ORGANISM: Homo sapiens
342 <400> SEQUENCE: 9
343 Pro Val Lys Thr Leu Pro Phe Ser Pro Ser Gln Phe Leu Asn Phe Trp
344      1           5           10          15
346 Asn Lys Gln Asp Thr Leu Glu Leu Glu Ser Pro Ser Leu Thr Ser Thr
347      20          25          30
349 Pro Val Cys Ser Gln Lys Val Val Val Thr Thr Pro Leu His Arg Asp
350      35          40          45
352 Lys Thr Pro Leu His Gln Lys His Ala Ala Phe Val Thr Pro Asp Gln
353      50          55          60
355 Lys Tyr Ser Met Asp Asn Thr Pro His Thr Pro Thr Pro Phe Lys Asn
356      65          70          75          80
358 Ala Lys Tyr Gly Pro Leu Lys Pro Leu Pro Gln Thr Pro His Leu Glu
359      85          90          95
361 Glu Asp Leu Lys Glu Val Leu Arg Ser Glu Ala Gly Ile Glu Leu Ile
362      100         105         110

```

Use of n and/or Xaa has been detected in the Sequence Listing.
 → Review the Sequence Listing to insure a corresponding explanation is presented in the <220> to <223> fields of each sequence using n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/757,049A

DATE: 11/01/2001

TIME: 19:01:46

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF3\11012001\I757049A.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application Number
L:514 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:17
L:519 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17